

-continued

<400> SEQUENCE: 128

Arg Ile His Pro Tyr Asp Gly Asp Thr Phe Tyr Asn Gln Asn Phe Lys
 1 5 10 15

Asp

<210> SEQ ID NO 129

<211> LENGTH: 17

<212> TYPE: PRT

<213> ORGANISM: Artificial sequence

<220> FEATURE:

<223> OTHER INFORMATION: Kabat Defined Mov19 HC CDR2 Human

<400> SEQUENCE: 129

Arg Ile His Pro Tyr Asp Gly Asp Thr Phe Tyr Asn Gln Lys Phe Gln
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Gly

<210> SEQ ID NO 130

<211> LENGTH: 17

<212> TYPE: PRT

<213> ORGANISM: Artificial sequence

<220> FEATURE:

<223> OTHER INFORMATION: muFR1-49 Kabat defined HC CDR2

<400> SEQUENCE: 130

Ala Ile Tyr Pro Gly Asn Ser Asp Thr Thr Tyr Asn Leu Lys Phe Lys
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Gly

<210> SEQ ID NO 131

<211> LENGTH: 10

<212> TYPE: PRT

<213> ORGANISM: Artificial Sequence

<220> FEATURE:

<223> OTHER INFORMATION: huMov19 vHC CDR2

<400> SEQUENCE: 131

Arg Ile His Pro Tyr Asp Gly Asp Thr Phe
 1 5 10

1-127. (canceled)

128. A method of treating cancer in a subject, comprising administering a therapeutically effective amount of an antibody or antigen binding fragment thereof that specifically binds human folate receptor 1 (FOLR1) to the subject, wherein the antibody or antigen binding fragment thereof comprises:

- (a) a heavy chain CDR1 comprising the amino acid sequence SSFGMH (SEQ ID NO:72); a heavy chain CDR2 comprising the amino acid sequence YISSGSS-TIS (SEQ ID NO:73); and a heavy chain CDR3 comprising the amino acid sequence EAYGSSMEY (SEQ ID NO:74) and
- (b) a light chain CDR1 comprising the amino acid sequence RASQNINNLH (SEQ ID NO:69); a light chain CDR2 comprising the amino acid sequence YVSQSVS (SEQ ID NO:70); and a light chain CDR3 comprising the amino acid sequence QQSNSWPHYT (SEQ ID NO:71).

129. The method of claim **128**, wherein the heavy chain CDR2 comprises the amino acid sequence YISSGSS-TISY-ADSVKG (SEQ ID NO:85).

130. The method of claim **129**, wherein the antibody or antigen binding fragment thereof comprises a heavy chain variable domain comprising the amino acid sequence of SEQ ID NO:101 and a light chain variable domain comprising the amino acid sequence of SEQ ID NO:100.

131. The method of claim **128** wherein the antibody or antigen binding fragment thereof is a full length antibody.

132. The method of claim **128**, wherein the antibody or antigen binding fragment thereof is an antigen binding fragment, wherein the antigen binding fragment comprises a Fab, a Fab', a F(ab')₂, a single chain Fv (scFv), a disulfide linked Fv, an IgG-CH₂, a F(ab')₃, a tetrabody, a triabody, a diabody, a (scFv)₂, or a scFv-Fc.

133. The method of claim **128**, wherein the antibody binds to human FOLR1 with a K_d of 1.0 nM or better.

134. The method of claim **128**, wherein the antibody binds to human FOLR1 with a K_d of about 0.06 nM to about 1.0 nM.